

CLAIMS

1. An information recording medium on which there are recorded:
content information; and

5 button information for defining a button menu which allows an operation as for said content information, for each reproduction capability which is necessary to reproduce said content information.

2. The information recording medium according to claim 1, on which
10 there is further recorded attribute information which indicates the reproduction capability, in association with said button information.

3. The information recording medium according to claim 1, wherein
there is further recorded play list information for defining
15 reproduction sequence of said content information by a unit of item, on said information recording medium, and

said play list information includes: item information for specifying the item which constitutes said content information; and sub item information for specifying said button information corresponding to the item as a sub item.

20 4. The information recording medium according to claim 2, wherein said content information and said button information are multiplexed by a unit of packet, which is a physically accessible unit, and recorded on said information recording medium as an entire stream,

25 there is further recorded an object information file for storing correspondence definition information which defines a correspondence

relationship between the entire stream and the plurality of packets which are multiplexed, as reproduction control information for controlling reproduction of the entire stream, and

said attribute information is included in said object information file.

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5. The information recording medium according to claim 1, wherein said button information includes a plurality of button pages which can constitute the button menu and whose display can be changed to each other.

10 6. The information recording medium according to claim 5, wherein at least one of the plurality of button pages includes button command information for defining the operation.

7. The information recording medium according to claim 5, wherein at
15 least one of the plurality of button pages includes button control information being associated with at least one button image information which is displayed and outputted as the button menu, and for displaying and outputting the button image information.

20 8. The information recording medium according to claim 7, wherein the button control information includes at least one of button image number information which indicates association with the button image information, display position information which indicates a display position on the button menu of a button defined by the button image information, and near-by
25 button information which indicates a change in a state of the button caused by the operation.

9. The information recording medium according to claim 1, on which there is further recorded reproduction control information for controlling such that the button menu is displayed, with it superimposed on or replaced by one
5 portion of said content information, or is not displayed at all.

10. An information recording apparatus, comprising:

a first recording device for recording content information onto an information recording medium; and

10 a second recording device for recording button information for defining a button menu which allows an operation as for said content information, for each reproduction capability which is necessary to reproduce said content information.

15 11. An information recording method, comprising:

a first recording process of recording content information onto an information recording medium; and

a second recording process of recording button information for defining a button menu which allows an operation as for said content
20 information, for each reproduction capability which is necessary to reproduce said content information.

12. An information reproducing apparatus for reproducing said information recording medium according to claim 1,

25 said information reproducing apparatus comprising:

a reproducing device for reproducing said content information and

said button information recorded on said information recording medium;

a generating device for generating the button menu on the basis of said button information; and

a controlling device for controlling said generating device to generate
5 the button menu according to the reproduction capability of said information reproducing apparatus.

13. The information reproducing apparatus according to claim 12,
wherein said reproducing device pre-loads said button information before
10 reproduction of said content information.

14. The information reproducing apparatus according to claim 12, further
comprising a buffer memory for storing the generated button menu.

15 15. An information reproducing method of reproducing said information
recording medium according to claim 1,

said information reproducing method comprising:

a reproducing process of reproducing said content information and
said button information recorded on said information recording medium;

20 a generating process of generating the button menu according to the
reproduction capability of said information reproducing apparatus, on the
basis of said button information; and

a controlling process of controlling said generating process to generate
the button menu according to the reproduction capability of said information
25 reproducing apparatus.

16. An information recording / reproducing apparatus, comprising:

a first recording device for recording content information onto an information recording medium;

a second recording device for recording button information for
5 defining a button menu which allows an operation as for said content information, for each reproduction capability which is necessary to reproduce said content information;

a reproducing device for reproducing said content information and said button information recorded on said information recording medium;

10 a generating device for generating the button menu according to the reproduction capability of said information recording / reproducing apparatus on the basis of said button information; and

a controlling device for controlling said generating device to generate the button menu according to the reproduction capability of said information
15 recording / reproducing apparatus.

17. An information recording / reproducing method, comprising:

a first recording process of recording content information onto an information recording medium;

20 a second recording process of recording button information for defining a button menu which allows an operation as for said content information, for each reproduction capability which is necessary to reproduce said content information;

a reproducing process of reproducing said content information and
25 said button information recorded on said information recording medium;

a generating process of generating the button menu according to the

reproduction capability of said information recording / reproducing method on the basis of said button information; and

a controlling process of controlling said generating process to generate the button menu according to the reproduction capability of said information recording / reproducing method.

18. A computer program for recording control to control a computer provided for the information recording apparatus according to claim 10, said program making the computer function as at least one portion of said first recording device and said second recording device.

19. A computer program for reproduction control to control a computer provided for the information reproducing apparatus according to claim 12, said program making the computer function as at least one portion of said reproducing device, said generating device, and said controlling device.

20. A computer program for record / reproduction control to control a computer provided for the information recording / reproducing apparatus according to claim 16, said program making the computer function as at least one portion of said first recording device, said second recording device, said reproducing device, said generating device, and said controlling device.

21. A data structure including a control signal, comprising:
content information; and

button information for defining a button menu which allows an operation as for said content information, for each reproduction capability

which is necessary to reproduce said content information.